NEC Display Solutions, Ltd.

NP3250/NP2250/NP1250/NP3250W

Installation

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Easy stacking function with a maximum of four projectors enables higher brightness projection cost-effectively. Networkable projectors supporting Windows Vista. Cinematic video powered by HQV (Hollywood Quality Video).

- High Brightness up to 5000 ANSI Lumens (NP3250)
- Five optional lenses available for Flexible installation
- Manual lens shift
- Wired/wireless LAN capable
- Picture-in-Picture and Side-by-Side function
- Multiple input/output terminals

Functions and Features

High brightness projection with Easy Stacking Function

The Easy Stacking function maximize the brightness upto four projectors aligned vertically or horizontally. Brightness with four NP3250 projectors will be 5000 ANSI lumens x 4 units. In other words, high brightness equivalent to about 20000 lumens at maximum can be achieved. Since multiple projectors project images, it is possible to arrange the projectors so that the images on the screen will not be disrupted even if the power of either one of the projectors is turned off or anybody or anything obstructs the front of one of the projectors displaying images. Although it used to take time to set up a stack installation with ordinary projectors, a stack configuration with this projector is easy because of the Geometric Correction Tool built into the projector, the camera for the adjustment, and the newly developed dedicated software when installing the projector. The stack function requires that you download the Stacking Correction Tool utility software for installation on your PC, and then connect the supporting camera to the PC through the USB connector. Since the adjustment data will be stored in the projector, the PC and the camera are no longer required after initial setup.
The tool is free of charge and available from mid-August, 2009.

Supported OS	Windows XP/Vista 32-bit
Required component	Microsoft .NET Framework 3.5 Sun Microsystems Java (Version 6 update 7 or later)

Supported camera *	Digital camera	Canon EOS Rebel XSi (in North America) Canon EOS Rebel T1i (in North America) Canon EOS 450D (in Germany)
	Web camera	Logitech QuickCam® Pro 9000 Logitech QuickCam® Pro for Notebooks Logitech® Webcam Pro 9000 Logitech® Webcam C600

* The model names are for Japan. The model name may vary depending on the countries and regions.

Please see the flash animation about The Easy Stacking function.

Download of Stacking Collection Tool.

• Create correction data by fetching a test pattern projected by the projector successively with the camera.
* When installing multiple projectors side by side, be sure that the exhaust port of the projector and the air intake of the other one are kept away from each other.

Support for Windows Media Connect and Shared Folder

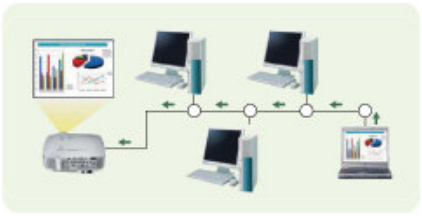
Files of still pictures and video images stored on a PC connected to the LAN or a server can be played back directly with the projector via the network. For the Shared Folder, video image files can be played back directly with the viewer of the projector even if Windows Media Player is not installed on the PC. Since the projector reads files on the PC or the server directly, it is not necessary to use any media, such as USB memory devices, reducing the risk of information leakage. Since the existing network environment can be used as is, it is also not necessary to provide a new environment.

Playable file formats : Windows Media Connect : JPEG, MPEG-2, WMV Shared Folder : JPEG, BMP, GIF, PNG, MPEG-2, WMV

Networkable projectors supporting Windows Vista

The projectors support "Windows Network Projector" function, which is one of the brand-new features introduced with Windows Vista. You can make presentations from your PC via the network without connecting RGB cable, if your PC is running Windows Vista. You don't need to install any proprietary software application on your PC. Like using a networked printer, you can simply select which projector to use from the list presented on your PC screen. Furthermore, it is possible to remotely operate a PC installed some distance away from the projector via the network by using “Windows Remote Desktop” function.

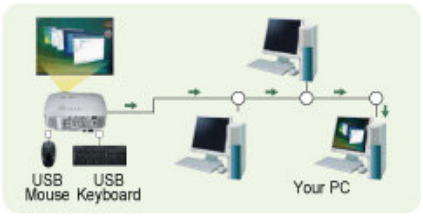
Windows Network Projector



A PC connected to LAN automatically detects projectors on the network.

*The network projector function is not available with Windows Vista Home Basic. The remote desktop function is not available with Windows Vista Home Basic and Windows Vista (32-bit version) Home Premium.

Windows Remote Desktop



When you connect a USB mouse and keyboard to the projector, you can remotely operate your PC via the network.

*Use a commercially available USB mouse and USB keyboard (US layout version). We do not warrant that the USB port of the projector will support all USB mouse and USB keyboards in the market.

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Cinematic video powered by HQV (Hollywood Quality Video)

HD-like, vivid and crisp DVD images can be projected with the Reon VX video processor using HQV technology from Integrated Device Technology, Inc.
HQV represents an enormous leap in video processing, with true flagship performance in noise reduction, de-interlacing and scaling.

- Random and Mosquito Noise Reduction
- Video and Film Cadence Detection (3:2 and 2:2 pull down)
- Per-pixel Motion Adaptive Deinterlacing
- Detail Enhancement
- Full 10-bit processing, scaling and warping

3 : 2 Pull down Detection

Not HQV HQV

Diagonal Interpolation to remove "jaggies"

Not HQV HQV

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The projector supports wired/wireless LAN

By connecting a LAN cable to the LAN port (RJ-45) on the projector or installing the wireless LAN unit on the projector, it is possible to transfer screen images from the PC to the projector more quickly (2 to 3 times faster than conventional models from NEC) for on-screen presentation using Image Express Utility 2.0 software (Windows XP/2000 are available). This projector can change presenters with a single operation. The person who wants to speak can send images from his/her PC to the projector just by clicking the "Become a Presenter" button. Furthermore, for a presentation in a large conference room, participants can confirm details of the projected images, such as small characters, etc., with their own PCs. A presenter can distribute files or documents used in the presentation through the network. And it is possible to turn the power of the projector on and off and switch input signals from a PC via the network.
Model name of the wireless LAN unit varies depending on the country where the unit is used (or to be used).
Operation of the USB Wireless LAN Unit is subject to the regulations of the countries listed below, and may be prohibited from using outside the country where you purchased.If you need to use the projector with the unit abroad, remove the USB Wireless LAN Unit from the projector before exporting.

Table of Supported Areas and Countries

NP01LM1 (option) [11b/g] For Asia,Oceania, Middle and Near East, South America	Thailand , China , Hong Kong , Singapore, South Korea , Malaysia , Vietnam , India , Australia , New Zealand , United Arab Emirates , Saudi Arabia , Oman , Peru , Chile , Russia , Indonesia , South Africa , Turkey , Ukraine , Philippines
NP01LM2 (Installed, or also available as an Option) [11a/b/g] For Europe	United Kingdom , Germany , France , Italy , Spain , Greece , Denmark , Belgium ,The Netherlands , Finland , Sweden , Portugal , Luxembourg , Ireland , Austria ,Poland , Hungary , Czech , Slovak , Slovenia , Malta , Estonia , Cyprus , Latvia , Lithuania , Romania , Bulgaria , Norway , Iceland , Liechtenstein , Switerland
NP01LM3 (Installed, or also available as an Option) [11a/b/g] For North America	United States , Canada , Mexico
NP01LM4 (Installed*) [11a/b/g] ForJapan	Japan
NP01LM5 (option) [11b/g] For Asia, South America	Argentina , Taiwan

Note that the USB port (Type A) and the USB Wireless LAN Unit cannot be used at the same time. When connecting a USB device such as a USB mouse, USB keyboard, or USB memory, first remove the USB Wireless LAN Unit from the projector.
*Available as Service parts, not as an Option.

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Picture-in-Picture and Side-by-Side function

This function projects two different signals simultaneously. The main picture signal supports the COMPUTER 1 and 2 inputs. The sub picture signal supports the VIDEO and S-Video inputs.

An image of picture-in-picture. A sub picture can be displayed either at the top-left, the top-right, the bottom-left, or the bottom right in the main picture.

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Five types of optional lenses available for Flexible installation

In order to support a variety of Installations, five types of lenses are available in addition to the standard lens. The projector supports screens from 30 to 500 inches; select the optimum lens depending on the specific installation environment, such as conference rooms, halls, and exhibitions. For a 100-inch screen, projection is possible at a distance 1.66 m (Wide Angle Fixed Lens) or between 2.4 m to 14.7 m. Lenses are easily replaced by the customer and do not require special tools.

Model		**Standard**	**NP01FL**	**NP02ZL**	**NP03ZL**	**NP04ZL**	**NP05ZL**
Lens type		**Zoom Lens**	**Wide Angle Fixed Lens**	**ZoomLens**	**Zoom Lens**	**Zoom Lens**	**Zoom Lens**
Option Lens							
Zoom/Focus		Manual	Manual (Focus only)	Manual	Manual	Manual	Manual
Zoom Ratio		1.33	-	1.3	1.58	1.6	1.52
Throw Ratio		1.5-2.0:1	0.8:1	1.2-1.5:1	1.9-3.1:1	3.0-4.8:1	4.7-7.2:1
Screen Size		30-500 inch	40-150 inch	30-500 inch	40-500 inch	60-500 inch	60-500 inch
Brightness	NP3250	5000 ANSI lm	3700 ANSI lm	4000 ANSI lm	4300 ANSI lm	4200 ANSI lm	4000 ANSI lm
	NP2250	4200 ANSI lm	3200 ANSI lm	3400 ANSI lm	3600 ANSI lm	3500 ANSI lm	3400 ANSI lm
	NP1250	3700 ANSI lm	3000 ANSI lm	3100 ANSI lm	3300 ANSI lm	3200 ANSI lm	3100 ANSI lm
	NP3250W	4000 ANSI lm	3000 ANSI lm	3200 ANSI lm	3300 ANSI lm	3300 ANSI lm	3200 ANSI lm
Lens Shift	Vertical	Max +0.5V	0	Max +0.5V	Max +0.5V	Max +0.5V	Max +0.5V
	Horizontal	Max ±0.1H	0	Max ±0.1H	Max ±0.1H	Max ±0.1H	Max ±0.1H
Weight		0.63 kg	1.1 kg	1.1 kg	1.13 kg	0.89 kg	0.92 kg

* : This is the brightness value when the lamp mode is set to "Normal Mode" and the preset mode is "High brightness mode". If the lamp mode is switched to "Eco Mode", the brightness will drop to about 80% in the NP3250 and NP3250W. For the NP2250 and NP1250 to the brightness drops to about 88%. If any other mode is selected as the preset mode, brightness may drop slightly.

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Throwing Distance

NP3250 / NP2250 / NP1250 (Aspect Ratio 4 : 3)

Screen Size (Inch)	Throwing Distance (m)					
	Standard	NP01FL	NP02ZL	NP03ZL	NP04ZL	NP05ZL
30"(0.61x0.46m)	0.9-1.2	-	0.7-0.9	-	-	-
40"(0.81x0.61m)	1.2-1.6	0.64	0.9-1.2	1.6-2.5	-	-

60"(1.22x0.91m)	1.8-2.5	0.98	1.4-1.9	2.4-3.8	3.6-5.8	5.7-8.8
80"(1.63x1.22m)	2.5-3.3	1.32	1.9-2.5	3.2-5.1	4.8-7.8	7.7-11.7
100"(2.03x1.52m)	3.1-4.1	1.66	2.4-3.2	4.0-6.4	6.1-9.8	9.6-14.7
120"(2.44x1.83m)	3.7-5.0	2.00	2.9-3.8	4.8-7.7	7.3-11.8	11.6-17.7
150"(3.05x2.29m)	4.7-6.2	2.50	3.7-4.8	6.0-9.6	9.2-14.8	14.5-22.2
200"(4.06x3.05m)	6.2-8.3	-	4.9-6.4	8.1-12.8	12.3-19.7	19.4-29.6
300"(6.10x4.57m)	9.4-12.5	-	7.4-9.6	12.2-19.3	18.5-29.7	29.2-44.5
400"(8.13x6.10m)	12.5-16.7	-	9.9-12.9	16.2-25.7	24.7-39.6	39.0-59.4
500"(10.16x7.62m)	15.7-20.8	-	12.4-16.1	20.3-32.1	30.9-49.5	48.9-74.4

NP3250W (Aspect Ratio 16 : 10)

Screen Size (Inch)	Throwing Distance					
	Standard	NP01FL	NP02ZL	NP03ZL	NP04ZL	NP05ZL
30"(0.65x0.40m)	0.9-1.3	-	0.7-1.0	-	-	-
40"(0.86x0.54m)	1.3-1.7	0.68	1.0-1.3	1.6-2.6	-	-
60"(1.29x0.81m)	1.9-2.6	1.03	1.5-2.0	2.5-4.0	3.8-6.1	6.0-9.2
80"(1.72x1.08m)	2.6-3.5	1.39	2.0-2.7	3.4-5.3	5.1-8.2	8.1-12.3
100"(2.15x1.35m)	3.3-4.3	1.74	2.6-3.4	4.2-6.7	6.4-10.3	10.1-15.5
120"(2.59x1.62m)	3.9-5.2	2.10	3.1-4.0	5.1-8.1	7.7-12.4	12.2-18.6
150"(3.23x2.02m)	4.9-6.5	2.63	3.9-5.0	6.4-10.1	9.7-15.5	15.2-23.3
200"(4.31x2.69m)	6.6-8.7	-	5.2-6.7	8.5-13.5	12.9-20.8	20.4-31.2
300"(6.46x4.04m)	9.9-13.1	-	7.8-10.1	12.8-20.3	19.5-31.2	30.8-46.8
400"(8.62x5.39m)	13.2-17.5	-	10.4-13.5	17.1-27.0	26.0-41.6	41.1-62.5
500"(10.77x6.73m)	16.5-21.9	-	13.0-16.9	21.4-33.8	32.5-52.1	51.4-78.2

* Stated projection distances are standard values. For a stack installation, the recommended projection distances will be different.
* The values in the tables are design values and may vary.

NEC Projector Throw Distance Calculator : NP3250/NP2250/NP1250 NP3250W

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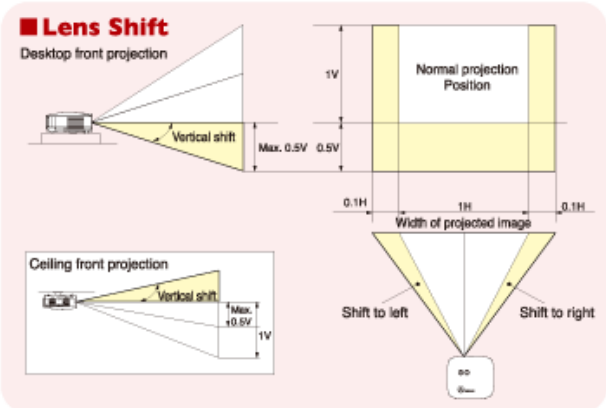
Manual lens shift for simple adjustment of projected images on screen and Keystone correction

With the manual lens shift mechanism, the position of projected images on screen can be adjusted in both the vertical and horizontal directions without moving the main unit. Furthermore, Keystone correction corrects distortions in the vertical and horizontal directions up to a maximum +/- 40 degrees in the horizontal direction and a maximum +/- 30 degrees in the vertical direction. Keystone correction can be operated by remote control.



The Lens Shift Dial
(Right / Left, Up / Down)
on the top side of the projector.

* Shifting the lens to the maximum in two directions combined will cause the edges of the image to become dark or will cause some shadows.
* The Lens Shift function is not available for the NP01FL.

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Multiple input/output terminals including DVI (digital) , BNC, and built-in stereo speakers

Multiple input/output terminals include analogue RGB, 5-core BNC, DVI (digital), video, and S-video. (The analogue RGB and BNC also support component inputs.) The 10W (5W+5W) stereo speakers are built in to provide audiovisual conditions with high image and audio qualities. Furthermore, the Viewer feature allows you to view slides stored on a USB memory on the projector. Even if no computer is available, presentations can be conducted simply with the projector.

Please click, so terminals area will be enlarged.

*To use the Viewer, first you need to create presentation materials on your PC (JPEG, BMP, GIF, PNG). Use commercially available USB memory devices. We do not warrant that the USB port of the projector will support all USB memory devices in the market.

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Specifications

Model Name		NP3250	NP2250	NP1250	NP3250W
LCD Panel *1		0.8 - inch (1024 x 768) LCD with MLA (Aspect Ratio 4:3)			0.74 - inch (1280 x 800) LCD with MLA (Aspect Ratio 16:10)
Lens	Manual Zoom / Focus	Throw ratio 1.5-2.0:1, F1.7-2.2, f=24.4-32.5mm (Standard Lens)			
	Manual Shift *2	Horizontal : max±0.1H / Vertical : max+0.5V			
Projection Distance		0.89m to 20.8m (Standard Lens)			0.94m to 21.91m (Standard Lens)
Projection Angle		0 to 14.4deg (Wide) / 0 to 10.8deg (Tele)			0 to 12.1deg (Wide) / 0 to 9.1deg (Tele)
Lamp (Eco Mode/Nomal Mode)		264W / 330W AC	264W / 300W AC		264W / 330W AC
Lamp Life *3 (Eco Mode/Nomal Mode)		3000H / 2000H			
Light Output *4 *5	Normal Mode	5,000 ANSI lumens	4,200 ANSI lumens	3,700 ANSI lumens	4000 ANSI lumens
	Eco Mode	Approx. 80% of Normal	Approx. 88% of Normal		Approx. 80% of Normal
Contrast Ratio (White / Black)		600 : 1			500 : 1
Quietness(Eco Mode/Nomal Mode)		31dB / 38dB	30dB / 34dB	30dB / 33dB	31dB / 38dB
Image Size (Diagonal)		30inch to 500inch (0.76m to 12.7m) (Standard Lens)			
Maximum Resolution		Analog : UXGA (1600 x 1200) , Digital : SXGA+ (1400 x 1050)			
Keystone Correction	Horizontal	Manual Approx. ±Max 40 degrees (Standard Lens) *6			
	Vertical	Manual Approx. ±Max 30 degrees (Standard Lens) *6			
Synchronization Range	Horizontal	15kHz to 108kHz (RGB : 24kHz or over)			
	Vertical	48Hz to 120Hz			
Video Bandwidth		Analog RGB : 165MHz (Maximum sampling rate) , Digital RGB : 121.75MHz (Max TMDS clock)			
Colour Reproduction		10 - bit signal processing (1.07 billion colours) (Computer3, Viewer, Network : 16.7 million colours)			

Input Terminals	3 Computer Input	1 D-Sub Mini 15pin (Computer 1 IN) 1 BNC x 5 (Computer 2 IN)	Compatible signals	VGA, SVGA, XGA, WXGA, WXGA+, SXGA, SXGA+, WSXGA+, UXGA
			RGB (Analog)	0.7Vp-p/75Ω
			H / V Sync	4.0Vp-p/TTL Level
			Composite Sync	4.0Vp-p/TTL Level
			Sync on G	1.0Vp-p/75Ω(with Sync) Negative Polarity
		2 Stereo Mini Jack	Stereo L / R	0.5Vrms/22kΩ or over
		1 DVI-D (Computer 3 IN)	Compatible signals	VGA,SVGA,XGA,WXGA+,SXGA (up to 60Hz)/480p,576p,720p,1080i (RGB)
			RGB (Digital)	T.M.D.S. Specification, with H.D.C.P. , Max Resolution : SXGA+/60Hz
		1 Stereo Mini Jack	Stereo L / R	0.5Vrms/22kΩ or over
	3 Component Input	1 RCA pin x 3	Y	1.0Vp-p/75Ω(with Sync)
		1 D-Sub Mini 15pin (Sharing with Computer 1 IN)	Cb•Cr (Pb•Pr)	0.7Vp-p/75Ω
		1 BNC x 5 (Sharing with Computer 2 IN)	Compatible signals	480i, 480p, 720p, 1080i/60Hz 576i, 576p, 720p, 1080i, 1080p/50Hz DVD Progressive (50/60Hz)
		1 RCA pin	Stereo L (MONO)/R	0.5Vrms/22kΩ or over
		Audio Input is Sharing with Computer 1&2		Same with Computer
	1 Video Input	1 RCA pin	Composite Video	NTSC/NTSC4.43/PAL/PAL-N/PAL-M/PAL-60/SECAM 1.0Vp-p/75Ω
		1 RCA pin x 2	Stereo L (MONO)/R	0.5Vrms/22kΩ or over
	1 S-Video Input	Mini DIN-4pin	Y	1.0Vp-p/75Ω
			C	0.286Vp-p/75Ω
		Audio Input is Sharing with Video		Same with Video
	1 Monitor Output	1 D-Sub Mini 15pin		Selected Computer 1, Computer2 or Component Signal
Output Terminals				Variable Output Level
	1 Audio Output	1 Stereo Mini Jack	Stereo L / R	Selected Computer1, Computer2, Computer3, Component, Video , S-Video Signal
	1 USB Port	Type A		USB2.0
	1 LAN Port	RJ - 45		100BASE-TX/10BASE-T
Control Terminals	1 Wireless LAN (USB Port)	Type A		IEEE 802.11b/g (NP01LM1 / NP01LM5)
	1 REMOTE	Stereo Mini Jack		Wired Remote Control
	1 PC Control	D-sub 9pin		RS-232C
Built-In Speaker				10W (5W+5W Stereo)
Environment		Operational Temperatures		5°C to 40°C(Eco Mode selected automatically at 35°C to 40°C), 20% to 80% Humidity (Non-Condensing)

	Storage Temperatures	-10° C to 50° C, 20% to 80% Humidity (Non-Condensing)		
Power Requirement		100 to 240V AC, 50Hz/60Hz		
Input Current		5.9-2.3A	5.5-2.2A	5.9-2.3A
Power Consumption	Normal Mode	490W	460W	490W
	Eco Mode	410W		
	Standby Mode	26W		
Heat Dissipation		1672BTU (Max)		
Regulations	For United States	UL Approved (UL 60950-1), Meets FCC Class B Requirements		
	For Canada	C-UL Approved (CSA 60950-1), Meets DOC Canada Class B Requirements		
	For Asia / Oceania	IEC60950-1, Meets AS/NZS CISPR.22 Class B		
	For Europe	Meets EMC Directive (EN55022 Class B, EN55024, EN61000 - 3 - 2, EN61000 - 3 - 3), Meets Low Voltage Directive (EN60950 - 1, TÜV GS Approved)		
	For Korea	KC (safety : K60950 - 1, EMC : K00022, K00024, K61000 - 3 - 2)		
	For China	GB4943, GB9254, GB17625.1		
	For Russia	Gost R 60950 - 1, 51318.22, 51317.3.2./3.3.		
Dimensions (W x H x D)		399mm x 150.5mm x 358mm (Not Including Protrusions)		
Net Weight		7.3kg		

*1 : Effective pixels are more than 99.99%.

*2 : The Lens Shift function is not available for the NP01FL.

*3 : Lamp life is defined as the average time span for the brightness of the lamp to be reduced by half, it dose not refer to the warranty period for the lamp.

*4 : This is the light output value (ANSI lumens) when the [PRESET] mode is set to [HIGH-BRIGHT]. If any other mode is selected as the [PRESET] mode, the light output value may drop slightly.

*5 : Compliance with ISO21118-2005

*6 : When the lens shift is set to the center. When the lens shift is used and yet the image is not displayed in the center of the screen, the adjustable range will be increased or decreased. Image is projected in Wide (Zoom lever).

All specifications are subject to change without notice.

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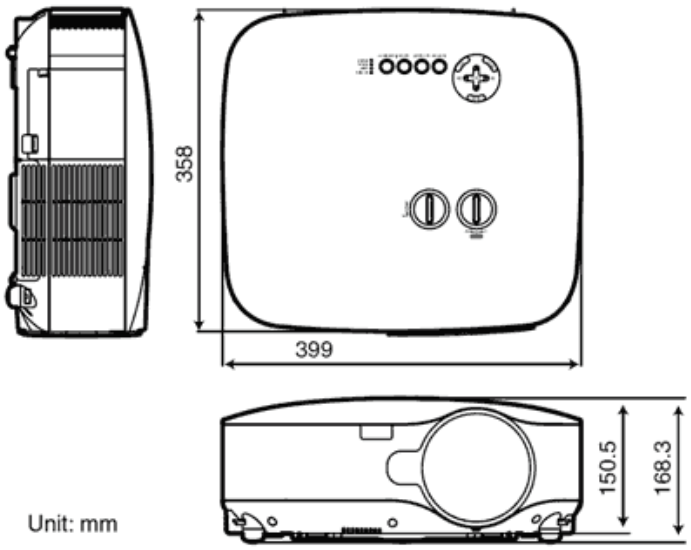
Dimensions



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Accessories

Options

Replacement lamp
NP06LP

Ceiling mount kit
NP05CM

Remote Control

Please click, so upper image will be enlarged.

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Model codes, specifications and available options may differ by region.
For detailed information, please contact the NEC sales company or dealer in your area.